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Expanding the organ donor pool: The Spanish Model

To the Editor: We read with interest the discussions of Dr. Hou regarding the best ways to improve organ donations [1]. As usually happens in this field, most strategies are cited to imply that they did not achieve significant improvements. Rather surprising, the Spanish experience is not even considered, despite the fact that Spain is the only large country (40 million citizens) in the world with a sustained and progressive increase of cadaveric organ donation rates during the last decade.

Since the National Transplant Organization was established in 1989, together with a national network of in-hospital, specifically trained, part-time, dedicated, and strongly motivated physicians in charge of organ procurement [2], Spain has increased its organ donations from 14 to 33.6 organ donors per million people in 1999, a 142% increase [3]. This organ donor rate is by far the highest in the world (the United States has 21.8 per million people, Canada has 13.8, and the mean of the other European countries is 14.3), which has also resulted in the highest transplant rates of cadaveric kidney, liver, heart, and lungs [4]. There was no change in legislation during this period and, as in most European countries, permission from the family is always obtained before donation.

The number of renal transplants rose from 1039 in 1989 to 2023 ten years later, 99% cadaveric (50.6 per million people versus 29.9 in the United States), a significant and sustained increase that, at least in our opinion, deserves a reference in reviews from authors of possible methods to expand the donor pool. The "Spanish Model" results from the efforts of many to overcome obstacles such as untrained or under trained staff, unidentified donors, and the reluctance to approach grieving family members.

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Bone mass evolution after renal transplantation

To the Editor: Now that tailoring immunosuppression is possible, efforts have concentrated on the prevention of post-transplant complications, including bone demineralization. In this context, the recent study by Westeel et al suggests that cyclosporine-steroid immunosuppression may prevent post-transplant osteopenia [1].

Unfortunately, this conclusion is not convincing. It rests only upon data collected between 3 and 24 months post-transplantation. When the first post-transplant months are included, all published studies agree that cyclosporine-steroid–based immunosuppression is consistently associated with bone loss [2, 3]. We have confirmed this conclusion in 44 unselected graft recipients (Fig. 1).

The bone loss between 3 and 24 months post-transplantation that can be anticipated from the results of previous studies averages 1.5% [2, 3]. The results of Westeel et al that were collected during this interval are thus of borderline significance when the precision error of the methods used to evaluate bone mass is considered (0.4 and $\pm$ 2 to 4% for the dual energy x-ray absorptiometry and the quantitative computed tomography [4], respectively).

Finally, these authors' conclusions are limited by patient selection, specifically excluding osteopenic post-menopausal women. Indeed, the independent effect on bone mass when the normal ovarian cycle is resumed in pre-menopausal women, as well as the prescription of potential osteogenic drugs (such as statins or thiazides) and the increased mobilization associated with successful renal transplantation, is not considered.

The clinician concerned with the fate of the patient throughout the first post-transplant year will find minimal data to rely on cyclosporine to specifically protect bone structure.

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